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**PPE REGULATION 2016/425 – ANNEX V
MODULE B – EU TYPE EXAMINATION
ASSESSMENT REPORT**

Respiratory protective device

Report n°	19.0199
Technical referential	EN 14387:2004 + A1:2008
Type of device	PPE category III Gas filter
Class	A1
Model	XPG6001 A1

Fontaine, the 10/12/2019

Report sent for the attention of Maggie Zhong to the email addresses below:
info@shmagic-safe.com and Maggie-Zhong2001@vip.sina.com

This report includes 14 pages

The technical assessment manager
Immaterial original

BARBETTA

Validation électronique

M.MEPI.324.V1

Summary

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1.Introduction - Description of the service

This assessment report concerns PPE category III – Gas filter as defined in EN 14387:2004 + A1:2008.

Its purpose is to assess the conformity of the PPE with the PPE REGULATION 2016/425, with a view to be placed on the European market exclusively.

The assessment was conducted in accordance with purchase order signed on 21/01/2019 placed by SHANGHAI MAGIC DEVELOPMENT for the count of XIAMEN CHENGHUANG AUTOMOTIVE MATERIAL CO, LTD.

Company: XIAMEN CHENGHUANG AUTOMOTIVE MATERIAL CO, LTD. – 2/F, No 39 Xinchang Road – Xinyang Industrial Zone – Haicang District - XIAMEN – China 361000

2.Use of the report

This assessment report only concerns the equipment identified in clause 4 and described in clause 7.

Only an integral reproduction of this assessment report is authorized.

The manufacturer, or his representative, commits himself not to use this assessment report for equipment that is not strictly identical to the equipment covered by this re assessment report.

3.Economical operator(s)

XIAMEN CHENGCHUANG AUTOMOTIVE MATERIALS CO, LTD. – 2/F, No 39 Xinchang Road –Xinyang Industrial Zone – Haicang District - XIAMEN – China 361000

4.Identification of the equipment

Class: **A1**

Model: **XPG6001 A1**

5.Conditions for use of the equipment

This gas filter is intended to be used in combined with other components as a respiratory protective device against gases.

6.Reference specification

The assessment of conformity with Regulation 2016/425 of 9th march 2016 "Personal Protective Equipment" was conducted taking into account the provisions of European standard EN 14387:2004 + A1:2008 "Respiratory protective device – Gas filter and Combined filter".

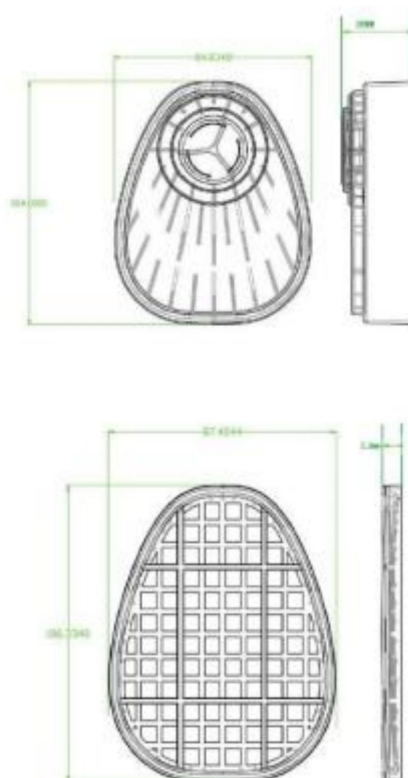
7. Technical Documentation

7.1. Identification

Identification of the assessed Technical Documentation:

1. Authorized representative – Company: Mr Li Linkagie ZHONG - XIAMEN CHENGCHUANG AUTOMOTIVE MATERIALS Co, Ltd.
2. Commitment signature date: 15/10/2019, last update received the 05/12/2019
3. Technical Documentation reference: not applicable

7.2. Drawing



7.3.Description

Gas filter type A1 to be used as twin filter composed of an ABS case with a bayonet connector and with activated carbon. Gas filter for use with the half mask of the same manufacturer and with the same connection.

7.4.Description of components

Detailed description of components in the Technical Documentation.

7.5.CE Marking

✖ Notified body in charge of assessment control to article 19c) of PPE regulation (module C2 or D):

APAVE SUDEUROPE SAS

✖ CE mark: **CE 0082**

✖ Graphic of letters C and E: **Conform**

✖ Height of mark: **5mm**

✖ Marking clear and permanent: **Conform**

✖ Location of the marking: **On the filter**

7.6.Packaging

Month and year of obsolescence is indelibly and unambiguously marked on the packaging.

8. Correlation between the articles of PPE Regulation 2016/425 and the reference standard

The following table shows the correlation between the essential health and safety requirements of Regulation 2016/425 of 9th march 2016 "Personal Protective Equipment" and the articles of the European standard EN 14387:2004 + A1:2008 "Respiratory protective device – Gas filter and combined filter".

PPE Regulation 2016/425 Annex II	Clauses of the standard
1.1.2.1	6.5
1.1.2.2	5
1.2.1	6.3 ; 6.7
1.2.1.1	6.4
1.2.1.2	6.3
1.3.2	6.5 ; 6.9 ; 6.10
1.3.3	6.6
1.4	8 ; 9
2.4	6.8
2.9	6.6
2.10	6.6
2.12	8
3.10.1	6.6 ; 6.11 ; 6.12 ; 6.13 et 6.14

WARNING: Other requirements and other EU Directives maybe applicable to the products falling within the scope of this European Standard.

9.Examination report

Article of the standard EN 14387+A1	Content	Conformity*			Comments
		Yes	No	N-A	
Art. 6	Requirements				
Art 6.3	Design The filter shall be sufficiently robust to withstand the rough usage it is likely to receive in service. No part of the filter likely to be in contact with the wearer shall have sharp edges or burrs. The filter shall be designed to ensure its full function in any orientation.	✓			
Art 6.4	Materials The filter shall be made of suitable material to withstand normal usage and exposures to those temperatures, humidity and corrosive environment that are likely to be encountered. Internally it shall withstand corrosion by the filtering media. Any material of the filter media or any gaseous products that may be released by the air flow through the filter shall not be known to constitute a hazard or nuisance for the wearer.	✓			Manufacturer statement
Art 6.5	Mass The maximum mass of filter designated to be used directly connected to a half mask is 300g. The maximum mass of filter designated to be used directly connected to a full face mask is 500g.	✓			Mass < 150g
Art 6.6	Connection The connection between filter and face piece or other device with which it is intended to be used shall be robust and leak tight. The connection between filter and face piece may be achieved by a permanent or special connector or a screw thread including a thread conforming to EN 148-1. Threads conforming to EN 148-2 or EN 148-3 shall not be used. If the filter is designated to be used on a multiple filter face piece or has any other thread, it shall not be possible to connect it to a thread conforming to EN 148-1, EN 148-2 or EN 148-3. The filter shall be readily replaceable without use of special tools and shall be designed or marked to prevent incorrect assembly. The particle filter of combined filters shall be on the influent side of the gas filter.	✓			
				✓	

* The measurement uncertainties are not taken into account for the assessment of conformity.

Article of the standard EN 14387+A1	Content	Conformity*			Comments
		Yes	No	N-A	
Art 6.7	Multiple filters Where respirators are designed to use more than one filter (i.e. multiple filter device) through which the flow is proportioned all requirements given in this European Standard are to be met by the completes et of filters (e.g. the total mass of a filter set designated to be used directly connected to a half masks shall not exceed 300g). If however it is possible that a single filter of a multiple filter device may be used alone, then the requirements of the full flow rate for the tests, as stated in this European standard, shall be met. In the information supplied by the manufacturer all necessary information on how to use multiple filters shall be given.	✓		✓	
Art 6.8	Packaging Filters shall be offered for sale packaged in such a way that they are protected against mechanical damage or visible contamination before use. Where appropriate, filters shall be factory sealed to protect the filter media against environmental influences in such a way that the breaking of the factory sealing can be identified.	✓			
Art 6.9	Mechanical strength (M.S.) Filters shall be subjected to the mechanical strength test when required by the relevant clauses of this standard. After this treatment the filters shall show no mechanical defect and shall meet the requirement of the relevant clauses.	✓			Date of test: 13/05/2019
Art 6.10	Temperature conditioning (T.C.) Filters shall be subjected to the temperature conditioning test when required by the relevant clauses of this standard. After the treatment the filters shall show no signs of damage and shall meet the requirement of the relevant clauses.	✓			Date of test: 10/05/2019

* The measurement uncertainties are not taken into account for the assessment of conformity.

Article of the standard EN 14387+A1	Content	Conformity*			Comments
		Yes	No	N-A	
Art 6.11	Breathing resistance The resistance imposed by filter to the flow of air shall be as low as possible and in no case exceed the values shown below. For multi type gas filters with mixed classes and/or types, the value corresponding to the highest shall not be exceeded. Four filters shall be tested, two after the test for mechanical strength and two after the test for mechanical strength followed by the temperature conditioning test.	✓			Date of test: 20/05/2019
		✓			

Breathing resistance	Requirement mbar	After mechanical strength mbar		After mechanical strength and temperature conditioning test mbar	
		1	2	3	4
At 15 l/min	1.7	1.00	1.08	1.15	1.03
At 47.5 l/min	6.4	2.95	3.20	3.30	2.94

Article of the standard EN 14387+A1	Content	Conformity*			Comments
		Yes	No	N-A	
Art 6.12 Art 6.12.1	Gas capacity** General Filters shall meet the appropriate requirements of the article 6.12.2. Three filters shall be tested after the test for mechanical strength. NOTE The minimum breakthrough time is intended only for laboratory tests under standardised conditions. It does not give an indication of the possible service time in practical use. Possible service times can differ from the breakthrough times determined according to this standard in both directions, positive or negative depending on the conditions of use.	✓			Date of tests: 24/06/2019 Test flow : 15l/min
Art 6.12.2 Art 6.12.3	Types A, B, E, K, AX and special filters Type SX	✓			Results in table below
Art 6.12.3.1	Sorption			✓	
Art 6.12.3.2	Desorption			✓	
Art 6.13	Combined filters			✓	
Art 6.14	Clogging (optional)			✓	Not requested

* The measurement uncertainties are not taken into account for the assessment of conformity.

** Test subcontracted

Type/ class	Test gas	Minimum breakthrough time at test condition	Test gas concentration in air		Breakthrough concentration	Results (3 filters tested)		
			% by volume	mg/l		min		
A1	Cyclohexane (C6H12)	70 min	0.1	3.5	10	>120	>120	>120

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Article of the standard EN 14387+A1	Content	Conformity			Comments
		Yes	No	N-A	
Regulation	CE Marking (CE + Notified body in charge of module C2 or D) ;	✓			
	The CE marking shall be affixed visibly, legibly and indelibly to the PPE ;	✓			
	For PPE subject to ageing: the month and year of manufacture and/or, if possible, the month and year of obsolescence must be indelibly and unambiguously marked on each item of PPE placed on the market and on its packaging ;	✓			
	Name and address of the manufacturer ;	✓			
	Type, batch or serial number or other means of identification	✓			

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Article of the standard EN 14387+A1	Content	Conformity			Comments
		Yes	No	N-A	
Regulation	<p>Name and address of the manufacturer;</p> <p>Name, address and identification number of the notified body or bodies involved in the conformity assessment of the PPE (module B and module C2 or D) ;</p> <p>EU declaration of conformity or the internet address where the EU declaration of conformity can be accessed ;</p> <p>The risk against which the PPE is designed to protect ;</p> <p>The reference to this Regulation</p> <p>The references to the relevant harmonised standard(s) used, including ;</p> <p>The date of the standard(s), or references to the other technical specifications used ;</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>			

10. Conclusion

The PPE category III – Gas filter identified in paragraph 4 meets the Essential Health and Safety Requirements of PPE Regulation 2016/425 of 9th march 2016.

The assessment of conformity takes into account the compliance of the PPE with the provisions of European standard EN 14387:2004 + A1:2008, and with the conformity of manufacturer's technical documentation.

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